

### **REMARKS**

This amendment is being filed in response to the Office Action mailed May 1, 2007. In that Office Action, claims 1-19 were rejected on prior art grounds and claims 3 and 8 were objected to for informalities. Claims 1-19 have been cancelled and new claims 20-32 have been added. Accordingly, claims 20-32 are now pending in the application.

The cancellation of claims 1-19 is without disclaimer of the subject matter thereof and without prejudice to Applicants' right to later submit one or more claims covering the subject matter thereof in this or another application.

#### **Claim Objections**

Claims 3 and 8 stand objected to for various formalities. These claims have been cancelled, but the Examiner's objections have been taken into account in the preparation of the new claims 20-32.

#### **Claim Rejections**

Claims 1, 4-7, 10, 13-16, and 19 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Yoon. Claims 3, 8, 9, 12, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoon. Claims 2 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoon in view of Preston. Although the rejections of these specific claims has been rendered moot by their cancellation, the rejection is nevertheless traversed and discussed below as it relates to the new claims 20-32.

Yoon discloses a noise measurement technique for a base station in a wireless cellular phone system in which the base station transmits silence parameters to the mobile stations which then stop transmitting back to the base station all at the same time so that the base station can take a background noise reading. Applicants' invention is different. With regard to independent claim 1, it recites:

generating a periodic data signal modulated with data and periods of silence; and  
sending the periodic data signal as a voice communication through a vocoder and  
over a voice channel of a wireless communication system.

Yoon does not involve sending a periodic data signal modulated with data and periods of silence as a voice communication over a voice channel, nor does it send such a signal through the vocoder. Rather, Yoon's silence periods are carried out at a different layer; namely, after the vocoder and at the network transmission level where all reverse channel transmission from the mobile station is stopped.

For independent claim 29, Yoon does not teach or suggest generating a periodic data signal that is modulated with both data using FSK and periods of silence, and then sending it over a voice channel, such that the periodic data signal is sent using a carrier signal that is transmitted during not just the modulated data portions of the signal, but also the during the periods of silence. In Yoon, the silence periods are used to stop transmission altogether to the base station so that there would not be any carrier signal being transmitted during the periods of silence.

Thus, in the invention variously recited in the new claims, periods of silence are included in a periodic data signal that is sent over the voice channel of a wireless communication. As will be understood by those skilled in the art, blanking an FSK or other modulated data signal that is then sent over the voice channel is not the same as blanking the entire voice channel (and all other channels and transmissions) to the base station, which is what Yoon does to allow measurement of noise. As an example, when normal speech is being sent over the voice channel during a cellular telephone call, the transmission from the mobile station to the base station does not stop during each period of silence (e.g., between words or sentences). Rather, a signal is still transmitted, received, and processed, but simply contains essentially no data. Similarly, in the subject matter variously recited in Applicants' new claims, the periods of silence included in the periodic data signal do not result in a break in transmission to the base station (which is what Yoon teaches); rather, they just result in the transmitted carrier signal containing none of the data during those periods.

Nor would the subject matter of Applicants' claims be obvious in view of Yoon since that reference teaches the stoppage of all reverse channel transmission during the silence periods to enable a measurement of background noise. As noted above, putting the silence periods in a modulated data signal sent over the voice channel does not result in a break in transmission from the mobile station; thus, the purposes of Yoon would not be achieved by doing so.

Nor does the Preston patent suggest any such approach. Preston was cited for the use of FSK, but does not disclose or suggest Applicants' claimed use of periods of silence in the modulated data signal; nor does it provide any basis to so modify Yoon.

Accordingly, Applicants respectfully submit that all claims are allowable over the prior art. Reconsideration is therefore requested. The Examiner is invited to telephone the undersigned if doing so would advance prosecution of this case.

The Commissioner is hereby authorized to charge Deposit Account No. 07-0960 for a three month extension of time, as well as for any other required fees, or credit any overpayment associated with this communication.

Respectfully submitted,

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